# Allotment Evaluation (AE) For South Chiflo (#603)

Permittee		<u>Authorization Number</u> 3001161
Livestock Use	Preference AUMs	Allotment Active Suspended 00603 65 139
	Period of Use	Allotment Kind Season of Use South Chiflo 40 Cattle 05/01 – 06/18
	Kind of Livestock	Cow Calf
	Percent Public Land	AUMs are authorized at 100% public land
Allotment Profile	Physical Description	Allotment 603 is located approximately 6 miles west of Questa in Taos County, New Mexico. Elevation on this allotment is roughly between 7,500 and 9,000 feet. Landforms on the allotment include; arroyos, uplands and Cerro Chiflo. Portions of the allotment is within the Wild Rivers Recreation Area and the allotment borders the Rio Grande Wild and Scenic River.  Four soil types are identified within the BLM lands in this allotment;  Fernando-Hernandez association, nearly level. The soil consists of loam and clay loams, with rooting depths over 60 inches. Parent materials of alluvium derived from mixed sources comprise this soil. Average annual precipitation ranges between 10 and 14 inches. Hazards for erosion are moderate. Vegetation is characterized by western wheat, galleta, blue grama, winter fat, fourwing saltbush and sagebrush.  Petaca-Silva association, gently sloping. The soil consists of loams, with rooting depths between 20 to over 60 inches. Parent materials of weathered basalt and eolian materials comprise this soil. Average annual precipitation ranges between 10 and 14 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by western wheat, blue grama and sagebrush.  Rock outcrop-Raton complex, moderately steep. These soils consist of stony silt loams, with rooting depths up to 20 inches. Parent material of basalt residuum and mixed eolian sediment comprise these soils. Average annual precipitation in this complex ranges from 14 to 16 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by pinyon, juniper, muttongrass, Arizona fescue and western wheat.
	Land Status Acreage	<u>BLM</u> <u>State</u> <u>Private</u> 3,164 0 648

	Management Objectives	The allotment is under an 'Improve' ('I') management category. 'I' category allotments are managed in a manner to help the allotment achieve satisfactory ecological condition.
	Key Forage Species	western wheat, blue grama, winter fat and galleta
	Grazing System	Rotated with another BLM allotment
Management	Actual Use	AUMs Year
Evaluation		non-use 2009
		non-use 2008
		79 2007
		31 2006
		31 2005
		32 2004
		34 2003
		118 2002
		82 2001
		74 2000
	Utilization	Due to the lack of staff utilization studies have not been
		conducted. During the assessment visit it was determined that
		the allotment was receiving slight to moderate amounts of
		utilization.
	Climate	The past water year (Oct. 1, 2008 – Sept. 30, 2009) the average
		temperature has been slightly above average (1 to 2 degrees
		Fahrenheit above average) and precipitation has been slightly
		above average (0 to 2 inches). The winter was slightly wetter
		(.75 - 1.5  inches above normal) and was warmer $(2 - 3  degrees)$
		Fahrenheit above average). The spring was drier and warmer (0
		- 0.5 inches below normal and 2 - 4 degrees Fahrenheit above
		<u> </u>
		average, respectively) This should provide near average plant
		growth for cool season plants. The summer precipitation was
		near average (0 - 1.5 below normal) and slightly cooler (0 - 1
		below normal) which should provide near normal growth for
		warm season plants.
		Climate change is a concern not only in New Mexico but
		globally. "Effects of increasing atmospheric CO <sub>2</sub> levels on plants
		are predicted to cause dramatic changes in native vegetation.
		Global climate change may accelerate rates of plant extinction,
		while ecosystem structure and function may shift. Ecological
		response to global changes in climate could shift ecosystems
		(i.e., shrublands replacing grasslands) and have effects, not only
		to an individual species, but to the ecosystem itself by additions
		and deletions of vegetation species" (Johnson, H.B., and H.S.
		Mayeux. 1992. Viewpoint: A view on species additions and
		deletions and the balance of nature. Journal of Wildlife
		Management 45:322-333.)
		We anticipate that our monitoring efforts will help indicate
		vegetation shifts, allowing for management modifications to
		address global climate change.
		and the ground chimings.

#### Trend

Two long term trend plots were established on this allotment in 1983. One plot was relocated and re-read in 2009. Portions of this plot was disced in 2008. In the portions that were not disced shrubs have increased and grasses decreased.

A Rangeland Health Matrix was completed on September, 28 2009. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)\*10indicators=50/50\*100 = 100% similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional.

## Soil and Site Stability

Two indicators were deemed None to Slight, seven were deemed Slight to Moderate and one was deemed Moderate. Rating: 82%

### **Hydrologic Function**

Two indicators were deemed None to Slight, six were deemed Slight to Moderate and two were deemed Moderate. Rating: 80%

#### **Biotic Integrity**

Three indicators were deemed None to Slight, five were deemed Slight to Moderate and one was deemed Moderate. Rating: 84%

Overall Rating: 82%

Soils were rated at Functioning at Risk-Static, Biotic Flora was rated at Functioning at Risk-Static, and Biotic Fauna was rated at Functioning at Risk-Static.

Current livestock does not appear to be having an adverse affect on rangeland health. It is anticipated that with the treatments conducted in 2008 the functionality ratings will increase with time.

	Riparian	There is no riparian vegetation found on this allotment.
	Wildlife	Seasonal home ranges in the allotment include those for elk, deer, antelope, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.  Elk, antelope and deer are grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.
	Thursday	Critical wildlife areas on the allotment include winter range for elk. An important migratory corridor for avian and big-game species also occurs inside the allotment boundaries.
	Threatened and Endangered Species	It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment.  There is no designated critical habitat for any species listed by the USFWS within the allotment.
		Special status species that are likely to be found on the allotment include bald eagle and ferruginous hawk.
Conclusions and Recommendations		Overall, the BLM lands are in good condition with good diversity. One recommendation for this allotment is that another authorized grazing schedule be included in the permit to facilitate a rotation with Allotment #605, East Punche. This would allow for spring rest every other year on this and Allotment #605. The new schedule would be: 40 Cattle between July 30 – September 16 (07/30 – 09/16). A new term and condition of the permit would read that only one schedule could be used every other grazing year.

